



AMENDED SEQUENCE LISTING

(1) GENERAL INFORMATION:

(iii) NUMBER OF SEQUENCES: 15

5 (2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 63 nucleotides

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

10 (D) TOPOLOGY: linear

(ii) MOLCULE TYPE: artificial synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

ATGATGTCCT TTGTCTCTCT GCTCCTGGTA GGCATCCTAT TCCATGCCAC
CCAGGCTGTT AAC 63

15

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 50 nucleotides

(B) TYPE: nucleic acid

20 (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLCULE TYPE: artificial synthetic DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

ATGAAACTTC TCATCCTTAC CTGTCTTGTG GCTGTTGCTG CCAGGTAAAC 50

(2) INFORMATION FOR SEQ ID NO: 3:

(i) SEQUENCE CHARACTERISTICS:

5 (A) LENGTH: 22 nucleotides

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

GGTAACTGC CACCAGAAGA TA 22

(2) INFORMATION FOR SEQ ID NO: 4:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 20 nucleotides

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

AAGCTTCTTG GTTCAATGGC 20

(2) INFORMATION FOR SEQ ID NO: 5:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 25 nucleotides

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

5 (D) TOPOLOGY: linear

(ii) MOLCULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

AAGCTTGAAA CGCCATCAAC GGGAA 25

10 (2) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 24 nucleotides

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

15 (D) TOPOLOGY: linear

(ii) MOLCULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

CTCGAGCCTC AGTAGAGGTC CTGT 24

20 (2) INFORMATION FOR SEQ ID NO: 7:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 20 nucleotides

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLCULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

5 CTCTCTTGTC ATCTCTTCC 20

(2) INFORMATION FOR SEQ ID NO: 8:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 21 nucleotides

10 (E) TYPE: nucleic acid

(F) STRANDEDNESS: single

(G) TOPOLOGY: linear

(ii) MOLCULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

15 GGTTACGCGT CAAGATTCTG A 21

(2) INFORMATION FOR SEQ ID NO: 9:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 20 nucleotides

20 (B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLCULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

AGACTTTCGG AACAGAGGCA 20

(2) INFORMATION FOR SEQ ID NO: 10:

5 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 22 nucleotides

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

10 (ii) MOLCULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

ATCTTTTCC AGGTCAACAT CA 22

(2) INFORMATION FOR SEQ ID NO: 11:

15 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 23 nucleotides

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

20 (ii) MOLCULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

CATTCTATTC ATTCAGTGG ACA 23

(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 22 nucleotides

(B) TYPE: nucleic acid

5 (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLCULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

GAGATGTAGA GGCTGGAGAA CT 22

10

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 19 amino acids

(B) TYPE: Amino acid

15 (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLCULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

20 Met Met Ser Phe Val Ser Leu Leu Leu Val Gly Ile Leu Phe His
1 5 10 15
Ala Thr Glu Ala

(3) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

(E) LENGTH: 15 amino acids

(F) TYPE: Amino acid

5 (G) STRANDEDNESS: single

(H) TOPOLOGY: linear

(ii) MOLCULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

	Met	Lys	Leu	Leu	Ile	Leu	Thr	Cys	Leu	Val	Ala	Val	Ala	Ala	Arg
10	1				5					10					15

(3) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

(I) LENGTH: 1448 amino acids

15 (J) TYPE: Amino acid

(K) STRANDEDNESS: single

(L) TOPOLOGY: linear

(ii) MOLCULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:

20	Met	Lys	Leu	Leu	Ile	Leu	Thr	Cys	Leu	Val	Ala	Val	Ala	Ala	Arg
	1				5					10					15
	Leu	Thr	Ala	Thr	Arg	Arg	Tyr	Tyr	Leu	Gly	Ala	Val	Glu	Leu	Ser
					20					25					30

	Trp	Asp	Tyr	Met	Gln	Ser	Asp	Leu	Gly	Glu	Leu	Pro	Val	Asp	Ala
					35					40					45
	Arg	Phe	Pro	Pro	Arg	Val	Pro	Lys	Ser	Phe	Pro	Phe	Asn	Thr	Ser
					50					55					60
5	Val	Val	Tyr	Lys	Lys	Thr	Leu	Phe	Val	Glu	Phe	Thr	Asp	His	Leu
					65					70					75
	Phe	Asn	Ile	Ala	Lys	Pro	Arg	Pro	Pro	Trp	Met	Gly	Leu	Leu	Gly
					80					85					90
	Pro	Thr	Ile	Gln	Ala	Glu	Val	Tyr	Asp	Thr	Val	Val	Ile	Thr	Leu
10					95					100					105
	Lys	Asn	Met	Ala	Ser	His	Pro	Val	Ser	Leu	His	Ala	Val	Gly	Val
					110					115					120
	Ser	Tyr	Trp	Lys	Ala	Ser	Glu	Gly	Ala	Glu	Tyr	Asp	Asp	Gln	Thr
					125					130					135
15	Ser	Gln	Arg	Glu	Lys	Glu	Asp	Asp	Lys	Val	Phe	Pro	Gly	Gly	Ser
					140					145					150
	His	Thr	Tyr	Val	Trp	Gln	Val	Leu	Lys	Glu	Asn	Gly	Pro	Met	Ala
					155					160					165
	Ser	Asp	Pro	Leu	Cys	Leu	Thr	Tyr	Ser	Tyr	Leu	Ser	His	Val	Asp
20					170					175					180
	Leu	Val	Lys	Asp	Leu	Asn	Ser	Gly	Leu	Ile	Gly	Ala	Leu	Leu	Val
					185					190					195

	Cys	Arg	Glu	Gly	Ser	Leu	Ala	Lys	Glu	Lys	Thr	Gln	Thr	Leu	His
					200					205					210
	Lys	Phe	Ile	Leu	Leu	Phe	Ala	Val	Phe	Asp	Glu	Gly	Lys	Ser	Trp
					215					220					225
5	His	Ser	Glu	Thr	Lys	Asn	Ser	Leu	Met	Gln	Asp	Arg	Asp	Ala	Ala
					230					235					240
	Ser	Ala	Arg	Ala	Trp	Pro	Lys	Met	His	Thr	Val	Asn	Gly	Tyr	Val
					245					250					255
	Asn	Arg	Ser	Leu	Pro	Gly	Leu	Ile	Gly	Cys	His	Arg	Lys	Ser	Val
10					260					265					270
	Tyr	Trp	His	Val	Ile	Gly	Met	Gly	Thr	Thr	Pro	Glu	Val	His	Ser
					275					280					285
	Ile	Phe	Leu	Glu	Gly	His	Thr	Phe	Leu	Val	Arg	Asn	His	Arg	Gln
					290					295					300
15	Ala	Ser	Leu	Glu	Ile	Ser	Pro	Ile	Thr	Phe	Leu	Thr	Ala	Gln	Thr
					305					310					315
	Leu	Leu	Met	Asp	Leu	Gly	Gln	Phe	Leu	Leu	Phe	Cys	His	Ile	Ser
					320					325					330
	Ser	His	Gln	His	Asp	Gly	Met	Glu	Ala	Tyr	Val	Lys	Val	Asp	Ser
20					335					340					345
	Cys	Pro	Glu	Glu	Pro	Gln	Leu	Arg	Met	Lys	Asn	Asn	Glu	Glu	Ala
					350					355					360

	Glu	Asp	Tyr	Asp	Asp	Asp	Leu	Thr	Asp	Ser	Glu	Met	Asp	Val	Val
					365					370					375
	Arg	Phe	Asp	Asp	Asp	Asn	Ser	Pro	Ser	Phe	Ile	Gln	Ile	Arg	Ser
					380					385					390
5	Val	Ala	Lys	Lys	His	Pro	Lys	Thr	Trp	Val	His	Tyr	Ile	Ala	Ala
					395					400					405
	Glu	Glu	Glu	Asp	Trp	Asp	Tyr	Ala	Pro	Leu	Val	Leu	Ala	Pro	Asp
					410					415					420
	Asp	Arg	Ser	Tyr	Lys	Ser	Gln	Tyr	Leu	Asn	Asn	Gly	Pro	Gln	Arg
10					425					430					435
	Ile	Gly	Arg	Lys	Tyr	Lys	Lys	Val	Arg	Phe	Met	Ala	Tyr	Thr	Asp
					440					445					450
	Glu	Thr	Phe	Lys	Thr	Arg	Glu	Ala	Ile	Gln	His	Glu	Ser	Gly	Ile
					455					460					465
15	Leu	Gly	Pro	Leu	Leu	Tyr	Gly	Glu	Val	Gly	Asp	Thr	Leu	Leu	Ile
					470					475					480
	Ile	Phe	Lys	Asn	Gln	Ala	Ser	Arg	Pro	Tyr	Asn	Ile	Tyr	Pro	His
					485					490					495
	Gly	Ile	Thr	Asp	Val	Arg	Pro	Leu	Tyr	Ser	Arg	Arg	Leu	Pro	Lys
20					500					505					510
	Gly	Val	Lys	His	Leu	Lys	Asp	Phe	Pro	Ile	Leu	Pro	Gly	Glu	Ile
					515					520					525

	Phe	Lys	Tyr	Lys	Trp	Thr	Val	Thr	Val	Glu	Asp	Gly	Pro	Thr	Lys
					530					535					540
	Ser	Asp	Pro	Arg	Cys	Leu	Thr	Arg	Tyr	Tyr	Ser	Ser	Phe	Val	Asn
					545					550					555
5	Met	Glu	Arg	Asp	Leu	Ala	Ser	Gly	Leu	Ile	Gly	Pro	Leu	Leu	Ile
					560					565					570
	Cys	Tyr	Lys	Glu	Ser	Val	Asp	Gln	Arg	Gly	Asn	Gln	Ile	Met	Ser
					575					580					585
	Asp	Lys	Arg	Asn	Val	Ile	Leu	Phe	Ser	Val	Phe	Asp	Glu	Asn	Arg
10					590					595					600
	Ser	Trp	Tyr	Leu	Thr	Glu	Asn	Ile	Gln	Arg	Phe	Leu	Pro	Asn	Pro
					605					610					615
	Ala	Gly	Val	Gln	Leu	Glu	Asp	Pro	Glu	Phe	Gln	Ala	Ser	Asn	Ile
					620					625					630
15	Met	His	Ser	Ile	Asn	Gly	Tyr	Val	Phe	Asp	Ser	Leu	Gln	Leu	Ser
					635					640					645
	Val	Cys	Leu	His	Glu	Val	Ala	Tyr	Trp	Tyr	Ile	Leu	Ser	Ile	Gly
					650					655					660
	Ala	Gln	Thr	Asp	Phe	Leu	Ser	Val	Phe	Phe	Ser	Gly	Tyr	Thr	Phe
20					665					670					675
	Lys	His	Lys	Met	Val	Tyr	Glu	Asp	Thr	Leu	Thr	Leu	Phe	Pro	Phe
					680					685					690

	Ser	Gly	Glu	Thr	Val	Phe	Met	Ser	Met	Glu	Asn	Pro	Gly	Leu	Trp
					695					700					705
	Ile	Leu	Gly	Cys	His	Asn	Ser	Asp	Phe	Arg	Asn	Arg	Gly	Met	Thr
					710					715					720
5	Ala	Leu	Leu	Lys	Val	Ser	Ser	Cys	Asp	Lys	Asn	Thr	Gly	Asp	Tyr
					725					730					735
	Tyr	Glu	Asp	Ser	Tyr	Glu	Asp	Ile	Ser	Ala	Tyr	Leu	Leu	Ser	Lys
					740					745					750
	Asn	Asn	Ala	Ile	Glu	Pro	Arg	Ser	Leu	Lys	Arg	His	Gln	Arg	Glu
10					755					760					765
	Ile	Thr	Arg	Thr	Thr	Leu	Gln	Ser	Asp	Gln	Glu	Glu	Ile	Asp	Tyr
					770					775					780
	Asp	Asp	Thr	Ile	Ser	Val	Glu	Met	Lys	Lys	Glu	Asp	Phe	Asp	Ile
					785					790					795
15	Tyr	Asp	Glu	Asp	Glu	Asn	Gln	Ser	Pro	Arg	Ser	Phe	Gln	Lys	Lys
					800					805					810
	Thr	Arg	His	Tyr	Phe	Ile	Ala	Ala	Val	Glu	Arg	Leu	Trp	Asp	Tyr
					815					820					825
	Gly	Met	Ser	Ser	Ser	Pro	His	Val	Leu	Arg	Asn	Arg	Ala	Gln	Ser
20					830					835					840
	Gly	Ser	Val	Pro	Gln	Phe	Lys	Lys	Val	Val	Phe	Gln	Glu	Phe	Thr
					845					850					855

	Ile	Gln	Met	Glu	Asp	Pro	Thr	Phe	Lys	Glu	Asn	Tyr	Arg	Phe	His			
																1025	1030	1035
	Ala	Ile	Asn	Gly	Tyr	Ile	Met	Asp	Thr	Leu	Pro	Gly	Leu	Val	Met			
																1040	1045	1050
5	Ala	Gln	Asp	Gln	Arg	Ile	Arg	Trp	Tyr	Leu	Leu	Ser	Met	Gly	Ser			
																1055	1060	1065
	Asn	Glu	Asn	Ile	His	Ser	Ile	His	Phe	Ser	Gly	His	Val	Phe	Thr			
																1070	1075	1080
	Val	Arg	Lys	Lys	Glu	Glu	Tyr	Lys	Met	Ala	Leu	Tyr	Asn	Leu	Tyr			
10																1085	1090	1095
	Pro	Gly	Val	Phe	Glu	Thr	Val	Glu	Met	Leu	Pro	Ser	Lys	Ala	Gly			
																1100	1105	1110
	Ile	Trp	Arg	Val	Glu	Cys	Leu	Ile	Gly	Glu	His	Leu	His	Ala	Gly			
																1115	1120	1125
15	Met	Ser	Thr	Leu	Phe	Leu	Val	Tyr	Ser	Asn	Lys	Cys	Gln	Thr	Pro			
																1130	1135	1140
	Leu	Gly	Met	Ala	Ser	Gly	His	Ile	Arg	Asp	Phe	Gln	Ile	Thr	Ala			
																1145	1150	1155
	Ser	Gly	Gln	Tyr	Gly	Gln	Trp	Ala	Pro	Lys	Leu	Ala	Arg	Leu	His			
20																1160	1165	1170
	Tyr	Ser	Gly	Ser	Ile	Asn	Ala	Trp	Ser	Thr	Lys	Glu	Pro	Phe	Ser			
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	Gln	Lys	Thr	Met	Lys	Val	Thr	Gly	Val	Thr	Thr	Gln	Gly	Val	Lys
					1355					1360					1365
	Ser	Leu	Leu	Thr	Ser	Met	Tyr	Val	Lys	Glu	Phe	Leu	Ile	Ser	Ser
					1370					1375					1380
5	Ser	Gln	Asp	Gly	His	Gln	Trp	Thr	Leu	Phe	Phe	Gln	Asn	Gly	Lys
					1385					1390					1395
	Val	Lys	Val	Phe	Gln	Gly	Asn	Gln	Asp	Ser	Phe	Thr	Pro	Val	Val
					1400					1405					1410
	Asn	Ser	Leu	Asp	Pro	Pro	Leu	Leu	Thr	Arg	Tyr	Leu	Arg	Ile	His
10					1415					1420					1425
	Pro	Gln	Ser	Trp	Val	His	Gln	Ile	Ala	Leu	Arg	Met	Glu	Val	Leu
					1430					1435					1440
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AMENDED SEQUENCE LISTING

<110> Cheng, Winston T.K.
 Chen, Chuan-Mu
 Lin, Shwu-Wha
 Wang, Chih-Hong
 Lin, Chih-Jen
 Wu, Shinn-Chih

<120> Method for producing biologically active human factor VIII in the
 milk of transgenic animals driven by mammary-specific expression
 cassettes

<130> 683884-2US

<140> US 10/820,777
 <141> 2004-04-09

<160> 15

<170> PatentIn version 3.2

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 5 10 15
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 20 25 30
 Arg Val Pro Lys Ser Phe Pro Phe Asn Thr Ser Val Val Tyr Lys Lys
 35 40 45
 Thr Leu Phe Val Glu Phe Thr Asp His Leu Phe Asn Ile Ala Lys Pro
 50 55 60
 Arg Pro Pro Trp Met Gly Leu Leu Gly Pro Thr Ile Gln Ala Glu Val
 65 70 75 80
 Tyr Asp Thr Val Val Ile Thr Leu Lys Asn Met Ala Ser His Pro Val
 85 90 95
 Ser Leu His Ala Val Gly Val Ser Tyr Typ Lys Ala Ser Glu Gly Ala
 100 105 110
 Glu Tyr Asp Asp Gln Thr Ser Gln Arg Glu Lys Glu Asp Asp Lys Val
 115 120 125
 Phe Pro Gly Gly Ser His Thr Tyr Val Trp Gln Val Leu Lys Glu Asn
 130 135 140
 Gly Pro Met Ala Ser Asp Pro Leu Cys Leu Thr Tyr Ser Tyr Leu Ser
 145 150 155 160
 His Val Asp Leu Val Lys Asp Leu Asn Ser Gly Leu Ile Gly Ala Leu
 165 170 175
 Leu Val Cys Arg Glu Gly Ser Leu Ala Lys Glu Lys Thr Gln Thr Leu
 180 185 190
 His Lys Phe Ile Leu Leu Phe Ala Val Phe Asp Glu Gly Lys Ser Trp
 195 200 205

His	Ser	Glu	Thr	Lys	Asn	Ser	Leu	Met	Gln	Asp	Arg	Asp	Ala	Ala	Ser
210	210					215					220				
Ala	Arg	Ala	Trp	Pro	Lys	Met	His	Thr	Val	Asn	Gly	Tyr	Val	Asn	Arg
225					230					235					240
Ser	Leu	Pro	Gly	Leu	Ile	Gly	Cys	His	Arg	Lys	Ser	Val	Tyr	Trp	His
				245					250					255	
Val	Ile	Gly	Met	Gly	Thr	Thr	Pro	Glu	Val	His	Ser	Ile	Phe	Leu	Glu
			260					265					270		
Gly	His	Thr	Phe	Leu	Val	Arg	Asn	His	Arg	Gln	Ala	Ser	Leu	Glu	Ile
			275				280					285			
Ser	Pro	Ile	Thr	Phe	Leu	Thr	Ala	Gln	Thr	Leu	Leu	Met	Asp	Leu	Gly
	290					295					300				
Gln	Phe	Leu	Leu	Phe	Cys	His	Ile	Ser	Ser	His	Gln	His	Asp	Gly	Met
305					310					315					320
Glu	Ala	Tyr	Val	Lys	Val	Asp	Ser	Cys	Pro	Glu	Glu	Pro	Gln	Leu	Arg
				325					330					335	
Met	Lys	Asn	Asn	Glu	Glu	Ala	Glu	Asp	Tyr	Asp	Asp	Asp	Leu	Thr	Asp
			340					345					350		
Ser	Glu	Met	Asp	Val	Val	Arg	Phe	Asp	Asp	Asp	Asn	Ser	Pro	Ser	Phe
		355					360					365			
Ile	Gln	Ile	Arg	Ser	Val	Ala	Lys	Lys	His	Pro	Lys	Thr	Trp	Val	His
	370					375					380				
Tyr	Ile	Ala	Ala	Glu	Glu	Glu	Asp	Trp	Asp	Tyr	Ala	Pro	Leu	Val	Leu
385					390					395					400
Ala	Pro	Asp	Asp	Arg	Ser	Tyr	Lys	Ser	Gln	Tyr	Leu	Asn	Asn	Gly	Pro
				405					410					415	
Gln	Arg	Ile	Gly	Arg	Lys	Tyr	Lys	Lys	Val	Arg	Phe	Met	Ala	Tyr	Thr
			420					425					430		
Asp	Glu	Thr	Phe	Lys	Thr	Arg	Glu	Ala	Ile	Gln	His	Glu	Ser	Gly	Ile
			435				440					445			
Leu	Gly	Pro	Leu	Leu	Tyr	Gly	Glu	Val	Gly	Asp	Thr	Leu	Leu	Ile	Ile
	450					455					460				
Phe	Lys	Asn	Gln	Ala	Ser	Arg	Pro	Tyr	Asn	Ile	Tyr	Pro	His	Gly	Ile
465					470					475					480
Thr	Asp	Val	Arg	Pro	Leu	Tyr	Ser	Arg	Arg	Leu	Pro	Lys	Gly	Val	Lys
				485					490					495	
His	Leu	Lys	Asp	Phe	Pro	Ile	Leu	Pro	Gly	Glu	Ile	Phe	Lys	Tyr	Lys
			500					505					510		
Trp	Thr	Val	Thr	Val	Glu	Asp	Gly	Pro	Thr	Lys	Ser	Asp	Pro	Arg	Cys
		515					520					525			
Leu	Thr	Arg	Tyr	Tyr	Ser	Ser	Phe	Val	Asn	Met	Glu	Arg	Asp	Leu	Ala
	530					535					540				
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AMENDED SEQUENCE

LISTING

<110> Cheng, Winston T.K.
Chen, Chuan-Mu
Lin, Shwu-wha
Wang, Chih-Hong
Lin, Chih-Jen
Wu, Shinn-Chih

<120> Method for producing biologically active
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mammary-specific expression
cassettes

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<140> US 10/820,777

<141> 2004-04-09

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Nadel, Alan

From: Wang, Jolene
Sent: Wednesday, July 12, 2006 9:48 PM
To: Nadel, Alan; "
Cc: Huang, James; TA PATENT
Subject: RE: Draft Response to 683884-0002US (hFVIII-USA patent)--Urgent!!!

Claims 9 and 12 should be deleted since we have limited the claim scope to overcome the rejection, and the it should not be necessary to further define "the B-domain deleted human FVIII polypeptide."

According to the inventor, the transgene is kept in "an expression cassette" to introduce the transgene to the animal. In the original claims, "an expression cassette" was used but now it is replaced by "genome". I believe that claims 14 and 15 may be deleted if they cannot provide any substantive function. However, please let me know your opinions.

Thanks.

Jolene

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Akin Gump Strauss Hauer and Feld LLP
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Taipei 105, Taiwan, R.O.C.
(臺北市民生東路三段138號13樓)
Telephone: 886-2-6606-7512 *10
Cell phone: 886-931-089-856
Fax: 886-2-6606-5900
E-mail: jwang@AKINGUMP.com
jssimon2001@yahoo.com.tw

From: Nadel, Alan
Sent: 2006/7/13 [星期四] 上午 06:58
To: Wang, Jolene;
Cc: Huang, James; TA PATENT
Subject: RE: Draft Response to 683884-0002US (hFVIII-USA patent)--Urgent!!!

7/12/2006

Dear Jolene,

Further to my last e-mail below, attached in Microsoft WORD format is a working copy of the draft amended claims for this case, revised according to USPTO rules. I also revised the claims somewhat to be consistent with revisions to the specification and my preference to use "the" rather than "said," since they mean the same thing and "the" is easier for people to understand.

There are problems especially with claims 13-15. Please see my bold, bracketed questions and notes.

I strongly suggest that you or James call me by telephone to discuss this, as soon as possible.

Thanks.

Best regards.

AI

Phone: 215.965.1280

Fax: 215.965.1210

From: Nadel, Alan

Sent: Wednesday, July 12, 2006 4:36 PM

To: Wang, Jolene

Cc: Huang, James; TA PATENT

Subject: RE: Draft Response to 683884-0002US (hFVIII-USA patent)--Urgent!!!

Dear Jolene,

With reference to my last e-mail below, I have seen the reference in the Amendment to the Chen Declaration and have also obtained the original sequence listing from the prior attorneys. I am still working on this Amendment and related documents since this morning and will file them in a timely manner by First Class Mail to the USPTO by midnight tonight.

I will report to you tomorrow about this.

Best regards.

AI

From: Nadel, Alan

7/12/2006

Sent: Wednesday, July 12, 2006 9:52 AM
To: Wang, Jolene
Cc: Huang, James; TA PATENT
Subject: RE: Draft Response to 683884-0002US (hFVIII-USA patent)--Urgent!!!

Dear Jolene,

Thanks for your e-mail below and the attached draft Amendment. A very quick review shows that it does not mention the Chen Declaration under 37 CFR 1.132. I will work that into the Amendment.

I will also have to prepare a new amended paper and Computer Readable Format Sequence Listing on a floppy disk that contains the amendments to the sequence listing. Do you have any electronic copy of the sequence listing? If not, I can try to obtain a copy from the prior attorneys. If that is not successful, I can try to create one from the published application from the USPTO PAIR site, but that will be difficult, as everything is run together in WORD format. If I cannot do that within today's time frame, we can file the Amendment containing the amendments to the sequence listing in the body of the Amendment, but will likely receive a notice of incomplete response which will give us one month after receiving the notice to do the amended sequence listing properly.

I will do the best I can.

Best regards.

AI

From: Wang, Jolene
Sent: Wednesday, July 12, 2006 9:13 AM
To: Nadel, Alan
Cc: Huang, James; TA PATENT
Subject: RE: Draft Response to 683884-0002US (hFVIII-USA patent)--Urgent!!!

here you go.

Please be noted that the client would like to overcome the rejections by limiting the claim to the transgene comprising (a) a nucleotide sequence encoding a B-domain deleted human clotting factor VIII (FVIII) polypeptide of SEQ ID NO: 15, (b) a nucleotide sequence encoding a signal peptide comprising bovine alpha-lactalbumin (alpha-LA) of SEQ ID NO: 13 or bovine alpha-S1 casein peptide of SEQ ID NO: 14, added to a N-terminal of said B-domain deleted hFVIII polypeptide of SEQ ID NO: 15, and (c) an alpha-LA promoter; which should be distinguishable from the prior art.

Thanks

7/12/2006

Jolene

Jolene Wang (王惠玲)

Akin Gump Strauss Hauer and Feld LLP

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jssimon2001@yahoo.com.tw